



RISK TAKING BEHAVIOUR AMONG UNIVERSITY STUDENTS

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ABSTRACT

The study examined risk taking behaviour among university students. The sample in the study was 98 university students were selected randomly. Risk taking behaviour scale prepared by Singh & Shah (2011) consisted of 75 items in the scale. The descriptive statistics (mean, median, mode, skewness, kurtosis, ANOVA and t-test) were used to analyse the data. The results revealed that there is significant mean difference in risk taking behaviour in relation to stream. There is no significant mean difference in risk taking behaviour in relation to gender and location. The results of study revealed that there is no significant interaction in stream, gender and location in risk taking behaviour. On the basis of findings, it is suggested that there is need to involve students in creative tasks in order to inculcate creative thinking which enhance their risk taking behavior among them.

KEYWORDS: Risk taking behaviour.

INTRODUCTION

The 21st century is the age of competition, in which people are busy to keep themselves in a leading position. This competitive spirit bounds them to take risks. It is evident now that a risk-taker is more successful and position holder in the society (Sinha & Arora, 1982). Risk has been a concern of human beings from the earlier days of recorded history and most likely even before that. Risk is sometimes seen as the probability of an unwanted event occurring, but here risk is taken to mean the probability of an unwanted event occurring and severity of potential loss. Kogan & Wallach (1964) pointed out that, one can hardly afford to neglect the role that risk taking may play in thinking; it helps in some kind of decision making. Risk as a layman understands, may be an act where an individual undertakes to earn his livelihood. Generally, the term risk means a dangerous element or factor, where an individual is put in willingly/unwillingly in that situation.

Horbin (1974) is of the opinion that risk is a condition where there is possibility of loss as a result of deviation from the intended or expected situation. Kogan, et al. (1967) are of the opinion that risk means the extent at which the decision maker is willing to expose himself to possible failure in the pursuit of a desirable goal. Risk is a condition where both the aspects of an act are clearer to individual and the outcome clearly defines the success and failure (Chaubey, 1974). Risk taking means undertaking a task involving a challenge for achievement or a desirable goal in which there is a lack of certainty or a fear of failure. Risk-taking refers to the tendency to engage in behaviours that have the potential to be harmful or dangerous, yet at the same time provide the opportunity for some kind of outcome that can be perceived as positive (Matthew, 2009).

Byrnes et al. (1999) viewed gender differences in risk taking: A meta-analysis. The study was conducted on 150 participants in which the risk-taking tendencies of male and female were compared. Studies were coded with respect to type of task (e.g., self-reported behaviors vs. observed behaviors), task content (e.g., smoking vs. sex), and 5 age levels. Results showed that the average effects for 14 out of 16 types of risk taking were significantly larger than 0 (indicating greater risk taking in male participants). However, certain topics (e.g., intellectual risk taking and physical skills) produced larger gender differences than others (e.g., smoking).

Harris et al. (2006) found gender differences in risk assessment: why do women take fewer risks than men? The 657 participants assessed their likelihood of engaging in various risky activities relating to four different domains (gambling, health, recreation, and social), and reported their perceptions of (1) probability of negative outcomes, (2) severity of potential negative outcomes, and (3) enjoyment expected from the risky activities. Women's greater perceived likelihood of negative outcomes and lesser expectation of enjoyment partially mediated their lower propensity toward risky choices in gambling, recreation, and health domains. Perceptions of severity of potential outcomes was a partial mediator in the gambling and health domains. The genders did not differ in their propensity towards taking social risks. A fifth domain of activities associated with high potential payoffs and fixed minor costs was also assessed. In contrast to other domains, women reported being more likely to engage in behaviors in this domain. This gender difference was partially mediated by women's more optimistic judgments of the probability of good outcomes and of outcomes being more intensely positive.

Saxena & Puri (2013) studied relationship between risk taking behaviour, personality and sensation seeking tendencies among N.C.C cadets. The study was

conducted keeping the age factor in consideration, especially to know negative risk, if any. The study is conducted on 100 boys and girls in total, of 1st year and 11th year belonging to urban domicile. A survey of public and private college students (aged 16-19) revealed that there is significant relation between personality and sensation seeking. In addition risk-taking is not found to be correlated to personality and sensation seeking.

Hamid & Nawi (2013) Family Characteristics Associate with risk taking behaviour among Urban and Rural Adolescents in two Districts in Selangor. A Comparative Study. The objectives are to compare the prevalence and its associate factors in urban and rural. The results showed risky behaviour had no association with location of study and the prevalence were 81.7% (urban) and 84.7% (rural). Most of the parental factors unrelated to risky behaviour. Multiple logistic regressions had shown being a male, inadequate number of bedrooms, large number of household, family conflict and no family cohesion were the negative predictor in both areas. Hence, it is necessity for parents to protect their children as they must face utmost challenges during transitional period.

Azmawati (2015) studied Risk taking behaviour among urban and rural adolescents in two selected districts in Malaysia. A comparative cross-sectional study was conducted among 306 adolescents by multistage sampling from two selected schools with involvement of their parents. The prevalence of risk taking behaviours was 81.7% in the urban and 83.7% in the rural area ($p = 0.650$). Parental background factors such as parent's education level, marital status, health status, and income were unrelated with risk taking behaviour among adolescents. The multiple logistic regression test showed that being a male ($AOR = 4.55$, 95% $CI = 2.28-9.07$), inadequate number of bedrooms ($AOR = 11.54$, 95% $CI = 1.48-89.75$), and presence of family conflict ($AOR = 3.64$, 95% $CI = 1.49-8.89$) were the predictors among adolescents for risk taking behaviour in rural areas.

DELIMITATIONS OF THE STUDY

1. The present study was delimited to students of Punjabi University, Patiala only.
2. The present study was delimited to post-graduate streams i.e. humanities (M.A.-Punjabi/ Hindi/ History/ Education), Science (MSc.-Botany/ Zoology/ Physics), Commerce (M.A. Commerce) only.

OPERATIONAL DEFINITIONS

1. Risk taking behaviour understands as an act, where a man undertakes to earn his livelihood or does some act under compulsion. Risk taker is an individual who takes an act in his hands involving danger of his life social prestige or economic setup but he does the act willingly or unwillingly.
2. University Students are students from post-graduate streams i.e. humanities (M.A.-Punjabi/ Hindi/ History/ Education), Science (MSc.-Botany/ Zoology/ Physics), Commerce (M.A. Commerce)

RESEARCH METHOD

The present study was conducted by employing descriptive method of research. The descriptive method is the most popular and extensively used technique of investigation.

SAMPLE

A sample is a small group, which represents all the traits and characteristics of the

population. In the present study, 98 university students of Punjabi University, Patiala were selected randomly by lottery method. The list of university students is given in table 1:

Table 1: Stream-wise sampling distribution of university students

Sr. No.	Stream	Number of Male students		Number of Female students		Total
		Rural	Urban	Rural	Urban	
1	Humanities	9	2	7	7	25
2	Commerce	7	9	7	6	29
3	Science	6	-	17	21	44
	Total	22	11	31	34	98

RESEARCH TOOL

For each research problem, the researcher used certain devices to gather new facts or to explore new fields. The devices that are used by researcher for the purpose of data collection are called as the tools of research. In the present study the researcher used following tool:

1. Risk taking behaviour Scale (Singh & Shah, 2011) It has 75 statements and each statement has five modes of ratings i.e. strongly agree, agree, undecided, disagree and strongly disagree. The subjects have to select any of the option as per their level of agreement. All the items in the scale are positive, hence the items are scored as 5, 4, 3, 2 and 1 for the responses strongly agree, agree undecided, disagree and strongly disagree respectively.
2. Personal information sheet.

OBJECTIVES OF THE STUDY

1. To study risk taking behaviour among university students.
2. To study mean difference in risk taking behaviour among university students in relation to stream.
3. To study mean difference in risk taking behaviour among university students in relation to gender.
4. To study mean difference in risk taking behaviour among university students in relation to location.
5. To study interaction effect of stream, gender and location on risk taking behavior among university students.

HYPOTHESES OF THE STUDY

1. There is significant mean difference in risk taking behaviour among university students in relation to stream.
2. There is significant mean difference in risk taking behaviour among university students in relation to gender.
3. There is significant mean difference in risk taking behaviour among university students in relation to location.
4. There is significant no significant interaction effect of stream, gender and location on risk taking behavior among university students.

STATISTICAL TECHNIQUE USED

1. Mean, median, mode, S.D., skewness and kurtosis of the scores of university students was calculated on the risk taking behavior scale to ascertain the nature of score distribution.
2. ANOVA was calculated in order to study the interaction effect of stream, gender and location in relation to risk taking behavior among university students.

ANALYSES AND INTERPRETATION OF DATA

The purpose of the present research paper was to study risk taking behaviour among university students.

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Table 2: Frequency distribution on scores of risk taking behaviour along with mean, median, mode, S.D., skewness and kurtosis

C.I.	F	Frequency %	C.F.	C.F.P.
321-350	1	1.02	98	100
291-320	1	1.02	97	98.97
261-290	17	17.34	96	97.95
231-260	29	29.59	79	80.61
201-230	36	36.73	50	51.02
171-200	11	11.22	14	14.28
141-170	1	1.02	3	3.06
110-140	2	2.04	2	2.04
Mean=232.16, Median=230, Mode=222, S.D.=33.46, Skewness=-0.54197, Kurtosis=2.78				

It is evident from table 2 that mean scores for risk taking behaviour among university students turned out to be 232.16 (with standard deviation of 33.46) and median being 230. The minimum score was 112 and maximum score was 334 with a range of 222 for the distribution of risk taking behaviour among university students. It may also be observed that there are 32.64% university students falls below mean interval and there are only 51.01% university students in the mean interval (231.260). There are 19.38% university students falls above mean interval that is 298 or above.

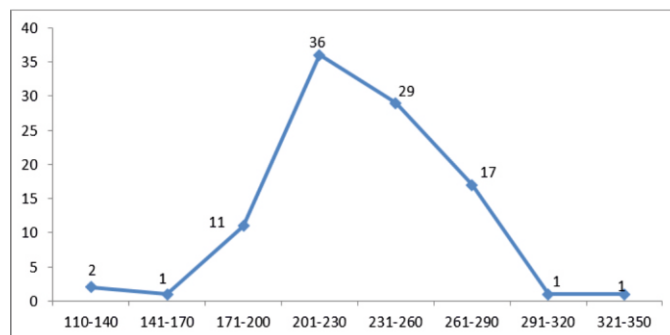


Fig.1 Frequency distribution graph on scores of risk taking behaviour among university students

The fig. 1 also highlighted that mean value calculated as 232.16 which is greater than median i.e. 230, hence the skewness is positive. The kurtosis came out to be 2.78 which is more than 0.263, hence the curve is platykurtic. The scores of risk taking behaviour among university students taken collectively can be used as designating high, average and low level of risk taking behaviour. The level depends upon the mean score ranging from 198.7 to 265.6 (i.e. 199 to 266) as obtained on the sample of 98 university students. The specific range for identifying levels of risk taking behaviour turned out to be greater than (>266) i.e. 267 to 334 for high level of risk taking behaviour, 199 to 265 for average level of teacher effectiveness and less than (< 199) i.e. 112 to 198 for low level of risk taking behaviour. The distribution of university students in three different levels of risk taking behaviour may be seen in table 3

Table 3 Identification of levels of risk taking behaviour among university students

Sr. No.	Level of risk taking behaviour	Range	No. of university students
1	High	324-340	17
2	Average	271-323	62
3	Low	234-270	19
	Total		98

Hence the mean performance on scale is indicative of the fact that the sample of 98 university students have average level of risk taking behaviour .

RISK TAKING BEHAVIOUR AMONG UNIVERSITY STUDENTS IN RELATION TO STREAM, GENDER AND LOCATION

In order to find out Risk taking behaviour among university students in Relation to Stream, Gender and Location, means and S.D.'s scores were computed as presented in table 4

Table 4: Mean and S.D.'s of Risk taking behaviour among university students in 3x2x2 Factorial Design (Stream x Gender x Location)

Groups		Stream (A)						
		Science (A1)		Humanities (A2)		Commerce (A3)		
		Gender (B)		Gender (B)		Gender (B)		
		Male (B1)	Female (B2)	Male (B1)	Female (B2)	Male (B1)	Female (B2)	Total
Rural (C1)	N	6	17	9	7	7	7	53
	M	235.33	218.71	251.11	239.14	244.43	245.29	235.70
	SD	19.96	39.66	29.15	30.22	24.68	45.08	34.97
Urban (C2)	N	-	21	2	7	9	6	45
	M	-	216.29	251.50	254.14	227.56	231.33	228.00
	SD	-	34.02	14.84	33.42	22.25	11.63	31.46
Total	N	6	38	11	14	16	13	98
	M	235.33	217.37	251.18	246.64	234.94	238.85	232.16
	SD	19.96	36.16	26.49	31.59	24.13	33.54	33.46

It is clear from the table 4 that mean risk taking behavior score among rural male of science stream is 235.33. The risk taking behavior mean score among rural female of science stream is 218.71 and mean risk taking behavior score among urban female of science stream is 216.29.

Further, the mean risk taking behavior among rural male and urban male of

humanities stream are 251.11 and 251.50 respectively. The mean risk taking behavior score among rural female of humanities stream is 239.14 and mean risk taking behavior score among urban female of humanities stream is 254.14. The table 4 also depicts that the mean risk taking behavior score among rural male and urban male of commerce stream are 244.43 and 227.56 respectively. The mean risk taking behavior score among rural female of commerce group is 245.29 and the mean risk taking behavior score among urban female of commerce group is 231.33.

It may also be observed that risk taking behavior is high among rural students (235.70) as compare to urban students (228.00).

Table 5: Means and S.D.s of university students on Risk taking behavior in AXB, BXC and AXC Designs

AXB & AXC Design		Stream(A)			Total
Gender (B)		Science (A1)	Humanities (A2)	Commerce (A3)	
Male(B1)	N	6	11	16	33
	M	235.33	251.18	234.94	240.42
	SD	19.96	26.49	24.13	24.78
Female (B2)	N	38	14	13	65
	M	217.37	246.64	238.85	227.97
	SD	36.16	31.59	33.54	36.56
Total	N	44	25	29	98
	M	219.82	248.64	236.69	232.16
	SD	34.79	28.95	28.25	33.46
Location(C) Rural(C1)	N	23	16	14	53
	M	223.04	245.88	244.86	235.70
	SD	35.92	29.26	34.91	34.97
Urban (C2)	N	21	9	15	45
	M	216.29	253.56	229.07	228.00
	SD	34.02	29.44	18.30	31.46
Total	N	44	25	29	98
	M	219.82	248.64	236.69	232.16
	SD	34.79	28.95	28.25	33.46
BXC Design		Gender (B)			Total
		Male(B1)	Female (B2)		
Rural(C1)	N	22	31		53
	M	244.68	229.32		235.70
	SD	25.21	39.67		34.97
Urban (C2)	N	11	34		45
	M	231.91	226.74		228.00
	SD	22.62	34.03		31.46
Total	N	33	65		98
	M	240.42	227.97		232.16
	SD	24.78	36.56		33.46

As per factorial design of 3x2x2, three way analysis of variance was performed on the scores of risk taking behavior to find out the main and interaction effects of stream, gender and location. The summary of ANOVA is given in table 6.

Table 6: Summary of Three way Analysis of Variance on Risk taking behavior (Stream x Gender x Location i.e. 3x2x2)

Source of Variation	Sum of Squares (SS)	df	Mean Square (MS)	F-ratio
Main Effects				
Stream (A)	8392.94	2	4196.47	4.05*
Gender (B)	260.99	1	260.99	0.25
Location (C)	279.29	1	279.29	.27
First Order Interaction				
A x B	464.48	2	232.24	0.22
B x C	210.47	1	210.47	0.20
A x C	1505.74	2	752.87	0.72
Second Order Interaction				
AxBxC	93.58	1	93.58	0.09
Error Within	90018.95	87	1034.70	
Total	5390786.00	98		

* $p < 0.05$

Main Effects

As per factorial design three main effects having three levels in stream and two levels each in gender and location are described below:

Stream (A)

The table 6 indicated that F-ratio for main effect of stream (A) came out to be 4.05, which is significant at .05 level. This indicates that stream has significant effect on risk taking behaviour. This indicates that there is significant mean difference in three levels of stream i.e. science, humanities and commerce. It is also inferred from the results that the risk taking behaviour is high in humanities stream, average in commerce stream and low in science stream.

In order to find out which of the difference in stream is significant, Tukey test was applied to compute least significant difference between two mean at .05 and 0.1 level (D). The matrix of mean differences along with D-value is given in table: 7

Table 7: Matrix of mean difference among science, humanities and commerce stream on university students along with D-value

	Science (219.82)	Humanities (248.64)	Commerce (236.69)
Science	-	28.82**(20.27)	16.87*(15.34)
Humanities	-	-	11.95*(15.34)
Commerce	-	-	-
	SD	SE _D	D _{.05}
	32.16	7.71	15.34

** $p < .01$, * $p < .05$

Note: Figures in brackets are D-values

The table 7 shows that the mean difference in science and humanities stream students came out to be 28.82. The university students belong to humanities stream had high mean score on risk taking behavior than science stream (D= 20.27, $p < 0.01$). Further, it also reveals that the mean difference in humanities and commerce stream students came out to be 16.87. The university students belong to humanities stream had high mean score on risk taking behavior than commerce stream (D= 15.34, $p < 0.05$). The table 4.12 also shows that the mean difference in humanities and commerce students came out to be 11.95. The university students belong to humanities stream had high mean score on risk taking behavior than commerce stream (D= 15.34, $p < 0.05$). Hence the hypothesis 1: "There is significant mean difference in risk taking behaviour among university students in relation to stream" was accepted.

Gender (B)

The table 7 indicated that F-ratio for main effect of gender (A) came out to be 0.25, which is not significant. This indicates that gender has no significant effect on risk taking behavior among university students. This indicates that there is significant mean difference in two levels of gender i.e. males and females. Hence the hypothesis 2: "There is significant mean difference in risk taking behaviour among university students in relation to gender" was not accepted. The result is not in line with Byrnes et al. (1999) and Harris et al. (2006).

Location ©

The calculated value of 'F' for the main effect of location (C) on risk taking behavior came out to be 0.27, which is not significant. It shows that location has no effect on risk taking behavior among university students. Hence the hypothesis 3: "There is significant mean difference in risk taking behaviour among university students in relation to location" was not accepted. The result is not in line with Hamid & Nawi (2013) and Azmawati (2015).

First Order Interactions

The first order interaction effects of two factors were found and are presented below:

A x B Interaction (Stream x Gender)

The table 7 indicates that F-ratio for AxB interaction came out to be 0.22 which is not significant. It may be indicated that stream and gender are independent to each other to explain the risk taking behavior among university students.

B x C Interaction (Gender x Location)

The calculated value of 'F' for the two way interactional effect of gender and location i.e. B x C came out to be 0.20 which is not significant. It may be indicated gender and location are independent to each other to explain the risk taking behavior among university students.

A x C Interaction (Stream x Location)

The table 7 reveals that F-ratio for the A x C interaction came out to be 0.72 which is not significant. It may be inferred that stream and location are independent to each other to explain the risk taking behavior among university students.

Second Order Interaction (AxBxC)

The calculated F-value for three way interactional effects among stream, gender and location (AxBxC) on risk taking behavior came out to be 0.09 which is not significant. It may be observed that the stream, gender and location are independent to each other to explain the risk taking behavior among university students. Hence the hypothesis 4: "There is no significant interaction effect of stream, gender and location on risk taking behavior among university students" was accepted.

On the basis of above results, it may also be observed there is no significant interaction effect found in stream and gender; gender and location and stream and location on risk taking behavior among university students. But in case of main effects the stream independently came out to be significant.

EDUCATIONAL IMPLICATIONS

- The teachers must provide appropriate activities and learning situations to students in order to inculcate creative thinking ability among students.
- The parents should also provide opportunities in fulfilling their children's needs and aspirations to satisfy their risk taking behavior and also provide them encouraging home environment in order to channelize their energy in right direction.

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